

Project-Based Learning

Characteristics of Well-Designed Project-Based Units

1. Students are at the center of the learning
2. Projects focus on important learning objective that are aligned with standard.
3. Projects are driven by Curriculum-Framing Questions
4. Projects involve on-going and multiple types of assessments
5. The project has real-world connections
6. Students demonstrate knowledge through a product or performance.
7. Technology supports and enhances student learning.
8. Thinking skills are integral to project work.
9. Instructional strategies are varied and support multiple learning styles

Intel Education - Characteristics of Projects

“Project based learning teaches
Collaboration
Critical Thinking
Written and oral communication
Value of the work ethic”

Edutopia - Bob Pearlman

“Assessment for learning starts with
outcomes, proceeds with projects,
products and performances that
maps to the outcomes and complete
the loop with assessments and
feedback to students.”

Edutopia - Bob Pearlman

Fundamentals

1. Create teams of three or more students to work on an in-depth project for 3-8 weeks.
2. Introduce a complex entry question that establishes a students need to know and scaffold the project with activities and new information that deepens the work.
3. Calendar the project through plans, drafts, timely benchmarks and finally the team's presentation to an outside panel of experts drawn from parents and the community.
4. Provide timely assessments and/or feedback on the projects for content, oral and written communication, teamwork, critical thinking, and other important skills.

Edutopia - Bob Pearlman

Common Misconceptions

1. Project based units are long and hard to keep focused.
2. PBL means a complete change in instructional practices.
3. PBL means a lot of work

Intel Education

Project planning involves the following steps:

1. Determining specific learning goals by using content standards and the desired higher-order thinking skills
2. Develop Curriculum-framing questions.
3. Make an assessment plan
4. Design activities

Intel Education - Planning Projects

Specific challenges facing teachers include:

1. Recognizing situations that make for good projects.
2. Structuring problems as learning opportunities.
3. Collaborating with colleagues to develop interdisciplinary projects.
4. Managing the learning process.
5. Integrating technologies where appropriate
6. Developing authentic assessments

Intel Education

“Students of today enter an increasingly globalized world in which technology plays a vital role. They must be good communicators, as well as great collaborators. The new work environment requires responsibility and self-management, as well as interpersonal and project-management skills that demand teamwork and leadership.”

Edutopia - Bob Pearlman

Sources:

Barrett, C. (2007). *Planning Projects*. Intel Education: Designing Effective Projects: Project Design Planning. Sunnyville CA. <http://educate.intel.com/en/ProjectDesign/Design/PlanningProjects/>

Barrett, C (2007). *Characteristic of Projects*. Intel Education: Designing Effective Projects: Project Design Planning. Sunnyville CA. <http://educate.intel.com/en/ProjectDesign/ProjectCharacteristics/>

George Lucas Educational Foundation (2006, June). *New Skills for a New Century: Students Thrive on Cooperation and Problem Solving*. Edutopia. www.edutopia.org